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Summary:
With the increase of power of the local authorities, especially with regards to movement of urban goods, we decided to focus on the manner in which local authorities in the area of Brittany planned the implementation of regulations and infrastructure. This research studies nine towns in Brittany, namely: Rennes, Saint-Malo, Saint-Brieuc, Lannion, Morlaix, Brest, Quimper, Lorient and Vannes. It is based on urban documents, and interviews with local authorities, followed by diagnosis.

Résumé :
Avec l'augmentation du pouvoir des collectivités locales, notamment dans le transport de marchandises, comment les collectivités locales élaborent-elles des réglementations ou des aménagements dans la région Bretagne ? 9 agglomérations bretonnes sont étudiées: Rennes, Saint-Malo, Saint-Brieuc, Lannion, Morlaix, Brest, Quimper, Lorient et Vannes. Cette recherche se base sur l'étude de documents d'urbanisme, des entretiens avec les élus locaux et des diagnostics.

Keywords :
Urban freight transport, national law and research, local authority planning and infrasctructure, modelisation, collective action.

Mots clés :
Le transport de marchandises, les lois nationales et les recherches, les réglementations et les aménagements locaux, modélisation, action collective.

The urban environment is the hub of the transportation of people and goods with a multitude of means of transport. The delivery of goods is essential to create the economic in a dynamic town centre. Urban goods transport is the movement by a vehicle of goods or materials. A delivery is a pause when goods are loaded and unloaded. This study only deals with the movement of goods between business

units, and the supply of public authorities, which represents 40% of all urban goods movement (vehicle-kilometre equivalent to private vehicles).
With the increase of power of the local authorities, especially with regards to movement of urban goods, we decided to focus on the manner in which local authorities in the area of Brittany planned the implementation of regulations and infrastructure. This research studies nine towns in Brittany, namely: Rennes, Saint-Malo, Saint-Brieuc, Lannion, Morlaix, Brest, Quimper, Lorient and Vannes. It is based on urban documents, and interviews with local authorities, followed by diagnosis.

I. The history of the government's consideration about the transport of goods

The history of planning about movement of goods shows the change of government's intervention. Before the early nineties, the principal interest was public transport and private motor vehicle traffic. Therefore, the movement of goods was limited in town centres in order to improve the flows of cars and buses. Some difficulties appeared:

- the economic activities, initially in the town centre, stet delocalised in areas around the periphery; so, the town centres were diminished.
- The restriction of the tonnage of goods vehicles made hauliers to organize differently and they chose to load the town centre with small vehicles up to 3,5 tonnes. So, it produced the opposite effect because it can contribute to an increase the number of the goods vehicles in the town centre.

In the early nineties, with the advent of the notion of sustainable development and environmental problems, the lorries were rapidly considered responsible for environmental pollution with the image of being polluting lorries. The authorities of European countries discovered a lack of data of urban goods movements. The French Government adopted a centralist policy: it didn't have any statistics about studies on town planning or technological solutions; the objective was to build a comprehensive quantitative survey in order to help local authorities to choose an adequate policy or infrastructures for the transport of goods. Therefore, the French Transport Ministry and the ADEME (the French Agency of Environment) commissioned a national research program called "the national program on goods in city" to provide local authorities with information. With this survey, the government decides in the way centralist and descending; the local power was restricted, answering to a centralist hierarchical approach.

Quantitative surveys have been implemented in three cities in France namely Bordeaux, Dijon and Marseille and experiments have been launched at the same time in several cities. During the same period, as a result of this survey, the first analysis revealed that several ratios were constant in different cities; so, the FRETURB model was developed by the Economic Laboratory of Transports (localised in Lyon), following the national researches, to calculate the generation of freight vehicle flows that an economic establishment can produce in a town centre. Consequently, the model can contribute towards planning urban goods movement and infrastructures.

The FRETURB model is a tool which can describe and calculate the freight vehicles delivery flows and anticipate the evolution of transport of goods; so, the interpretation of the results can resolve many problems of traffic and it can structure the collective action of the local authorities: it can aid the local authorities to make decisions or plan infrastructures. Therefore this tool called into question the previous central policy and, it produce a progressive approach in the choice of goods policy.

The government then decided to decentralize the politics of goods transport to local authorities: the government gave the priority to local projects and provoked a change: the relationships were not hierarchical but became horizontal with the increase of power to local authorities and partnerships.

II. The Urban Mobility Plan and municipal regulation: two regulations to define goods traffic

The regulation is the principal means for the authorities to influence the transport of goods; this regulation concerns not only the scale of the town centre but, moreover, the scale to include the outlying areas with the Urban Mobility Plan.

1. The Urban Mobility Plan

Since December 1996 with the French Clean Air Act (LAURE law) and the Law on Solidarity and Urban Renewal (SRU law) of December 2000, it became compulsory for metropolitan areas over 100 000 inhabitants to produce an Urban Mobility Plan that includes public transport and, moreover goods transport: according to the law, "*the Urban Mobility Plan defines the principles of passenger and freight transport, of traffic and parking regulations within the urban transport perimeter*". It intends to make the Urban Mobility Plan more effective and it obliges an Urban Mobility Plan to include freight issues. The Urban Mobility Plan came into being after a change in public action following to a quantitative survey that called into question the previous national politic; and, the Urban Mobility Plan can contribute to group together the multitude of local planning.

The Urban Mobility Plan produces a collective action and global thought regarding the problem thanks the actions of stakeholders: it questioned the transport of goods issue for local authorities in order to find more adequate regulations and solutions of infrastructures. In the Urban Mobility Plan, the collective action was organised with different groups of actors who were rallied to resolve the problem of goods transport traffic. The project became a tool of dialogue between different parties that anticipate public action: the town became a collective actor. The project was based on the existing town: according to Bernard Huet, "*to build the town wasn't innovative. There is a will to preserve town, a sense of protection*".

When the city adopted an innovative technological solution, it gave to the local authority the opportunity to be visible in competitive national context of territories: the city turns into a collective actor with a specific wish that was expressed in the project in its area. Moreover, the project became a tool of territorial marketing that includes the environment problem and the quality of life in urban areas.

Nevertheless, Vannes is producing an Urban Mobility Plan; Saint-Brieuc and Morlaix have produced a similar document:

- Saint-Brieuc has produced a voluntary Urban Mobility Plan (dated from 2005) but this plan mainly concerns public transport. Saint-Brieuc deals with the transport of goods in general namely: "*To define and to apply a new regulation of the transport of goods and delivery of goods*".
- Morlaix has produced the Community Scheme of Urban Movement (dated from 2007): the transport of goods has been envisaged on a larger scale than the town. In Morlaix, the subject was general: "*It was necessary to define the real needs in the delivery area, to be coherent between the time of delivery and the type of delivery, and to check the correct implement of the local regulation*".

For these two towns, the transport of goods has been dealt with public transport was the main concern: indeed, they were smaller towns and with a few number of deliveries so few opportunities of inconvenience caused by delivery vehicle traffic.

In the Urban Mobility Plan (dated from 2001), Lorient said that an urban distribution centre wasn't suited to the area and to resolve the problem of deliveries in the town centre. The authorities have become aware that it was necessary to resolve problems of delivery. The authorities undertook:

-"to *simplify the regulation*,
- to *define the hours of delivery suited to the practice of deliverymen*,
- to *put in place goods vehicle parking delivery areas*,
- to *promote environmentally-friendly vehicles*,
- to *act in consultation with delivery professionals*".

In the Urban Mobility Plan of Brest (dated from 2002), one of 18 projects is to build a scheme of transport of goods to better organise deliveries. The local manager intended:

- "to *have better knowledge of practice of deliveries*,
- *to develop partnerships with all the parties of goods transport*,
- *to guarantee available goods vehicle parking areas*".

Some initiatives were clearly defined:

- "*to do survey to increase knowledge*,
- *to simplify the regulation of delivery in the town centre*,
- *to build a plan of circulation of delivery vehicles*".

In the Urban Mobility Plan of Rennes (2007 to 2017), three objectives were defined:

- "*to define a plan of circulation of delivery vehicles*,
- *to involve the local authorities and the parties of the transport of goods in decision making*,
- *to improve the situation between the different road-users*".

Regarding smaller areas of Brittany, the goods transport was quite often a stimulating subject linked with the willingness to build a network of public transport. Indeed, the local authorities have chosen public transport because it promotes a good image of the town and of its politic to the electorate. On the whole, the Urban Mobility Plan doesn't revolutionize the organisation of transport of goods in the town centre; but, the action field of action of the authorities was restricted within the economic parties. Indeed, the goods must be delivered a particular moment in the day and in a particular place in the town that were decided by the addressee without necessarily respecting the regulation currently in force. In addition, the local authorities were confronted with a multitude of different persons of the goods transport so people together find it difficult to get a consensus.

2. The municipal regulation

The municipal regulation is a localized project in an area: some parties were in interaction to set together the objective of making Urban Mobility Plan a reality. This local regulation allows one to take resources into account from an operational point of view.

In the scale of Brittany, many regulations have similarities in their regulations:

- the regulations dated from 1980 with the increase of the goods transport or they were more recent to follow on from the application of national laws,
- as regards the weight, it's often 3,5 tonnes,
- as regards timetables of delivery, they are according to the peak time of the traffic of cars; generally, the deliveries were authorised until 10h00 or 11h00 and the removals of goods were at the beginning of the afternoon (generally until 16 hours).

Since the regulation in 1980' or 1990', fewer regulations have been passed except to forbid the deliveries in the area of pedestrian streets. To sum-up, all of the areas try to limit the increase of the traffic of the goods vehicles with the intention of facilitating the flow of public vehicles and of cars. And, all of the areas passed the law independently with a lack of consultation together and a lack of coordination between each regulation in an area. This provoked the splitting-up of local regulations: the increase of different local regulations or infrastructures can reduce the possibility of haulier to deliver in town centres because the local decisions were not coordinated each of them.

Given that they were the professionals of transport of goods, who wanted concrete solutions to resolve the problems of deliveries in the town centre, the local authorities were struggled when confronted by a subject that they misunderstood. Therefore, the authorities have recourse to the model in order to diagnose the practices of deliveries.

III. The use of the FRETURB Model to aid the local authorities to make decisions

In the area of Rennes, a planning department "Isis-Jonction" has produced a survey for 2001 to 2003 and has used the FRETURB model. The principal objective was to define innovative actions for urban

goods transport in the town centre. Firstly, the planning department has collected the point of view of shopkeepers, deliverers, carriers and the institutional administration. Then, they made a survey of the conditions of delivery namely the type of vehicles, the activity of the trade that receive a delivery, the type of handling charge, the packaging of goods, the type of parking of the delivery vehicles and the inconvenience of parking in traffic.

Thanks to the results obtained, the planning department has offered technological and innovative solutions: an urban distribution centre, delivery vehicle point and pick-up points. But, for a long time, no means have been buit in Rennes for the goods transport and the problems of circulation have increased in the town centre. And, the goods transport is relevant to the Urban Mobility Plan of Rennes 2007-2017.

In October 2007, the operator of public transport namely Keolis, has noticed following a survey that the delivery vehicles blocked the buses circulation when they were parked in bus lanes. According to this survey, 92% of deliveries blocked the buses circulation in two streets of Rennes and in 14% of incidents caused passenger alighting problems.

Then, Rennes Metropole decided to study the characteristics of the streets where the deliveries disturbed more the buses circulation: it was the objective of my internship for four months (November 2007 to February 2008). The objective was to update the results of the survey of Isis-Jonction, to verify the results of the survey of Keolis and to suggest solutions in order to reduce the conflict between the buses circulation and the delivery vehicles.

As well as this diagnosis, Rennes Metropole suggested that I take on an other internship of three months: the objective was to produce a leaflet to make local authorities of the town and the area more attentive to the goods movement in future urban regulation schemes. With this leaflet, the objective was to increase the local authorities awareness of an issue and to alert it in order to change the practices and their representation. And, now, Rennes Metropole is considering this leaflet and about new local regulations.

IV. Experimentation on delivery equipment thanks to a model or based without initial quantitative survey

1. Lannion: a survey shows that a distribution platform wasn't necessary for the deliveries in the town centre

The authorities of Lannion decide in 2001 to make a survey by a planning department who has used the FRETURB model. They define five objectives:

- to study the possibilities of parking near the station,
- to know the practices of the users of public transport and possibilities of intermodality,
- to analyze the potentiality to fit the itinerary for the pedestrian and the bike,
- to update the organisation of the traffic,
- to know the deliveries practises in the town centre and to bring out main points of action.

The subject of the goods transport wasn't the main concern of the local authorities but there is a will to improve the situation with a infrastructure: beyond the knowledge of the practises, the authority wants to identify the issue of a distribution goods platform infrastructure. This issue can offset the limited use of delivery areas and it can moreover reduce the inconvenience of deliveries on traffic.

The survey shows that the number of deliveries is higher than in the outlying areas. This survey highlights that a delivery platform wasn't suited to the deliveries practices in the town centre of Lannion because the place of delivery were too geographically dispersed and the volume of goods wasn't considerable.

2. In Saint-Malo, an experiment of distribution platform without survey

A haulage contractor, specialist in late-night deliveries, has decided to make good use of delivery vehicles during the day: these vehicles could be used for deliveries in the very heart of Saint-Malo. With financial support and a suitable regulation from the authorities, the platform has been built at the entrance of the town since 1999. Several road hauliers were interested by this infrastructure because they wanted to avoid the difficulties to deliver in the very heart of Saint-Malo with a lot of narrow streets. The road haulier who delivered the goods in the town centre has been employed as a subcontractor of the regional road haulier.

In this year, the distribution platform was a success: the number of deliveries increased by 30 tonnes of goods in the first month to 100 tonnes in the late year 1999. Despite the success of this infrastructure, the firm had to file a petition in bankrupcy in 2000 due to haulier debts. This example shows that it was very difficult to manage a distribution platform because it was dependent on economic factors and current trends of the roads hauliers.

3. In Morlaix, a long implementation of a distribution platform

In 1985, 1986, a distribution platform was built in the area of Morlaix and it was served by railway track. It was an innovate subject but the platform worked only for 3 years. The main objective of this infrastructure was to carry chilled foodstuffs. The goods were brought in by container by road up to the platform; then, the container was transferred on goods wagons of SNCF by crane. The platform closed because the activity was insufficient compared with the initial forecast. Moreover, the platform was confronted with the road transport lobbies.

In 2008, the area of Morlaix has bought the plot of land with the intention to start the distribution platform again with several partners; and, a company owns wagons and rents the tracks. The authorities of Morlaix were responsible for the renovations and they had to invest in loading equipments.

4. The location of delivery area in each town according to the needs

The delivery area was authorised by a municipal regulation that indicates the setting-up and the functioning of the infrastructure. This infrastructure was fitted according to the local needs, therefore without harmonization in the local regulation.

In spite of an important number of goods vehicle parking areas in the town centre of each area, a lot of private cars parked on them and the deliverymen must park his goods vehicle in the traffic because of lack of space. All the authorities were confronted by this problem because there isn't any means of checking. Although the increase of the vehicles goods parking areas, their location according to the needs without real global coordination to organize the offer of parking area. And, the authorities town continue to make regulations without coordination with the other areas.

Conclusion

The goods transport was ignored for a long time by national and local politics; but, the deliveries were a necessity to keep commercial activities in the town centre. With decentralization, the local areas have more power to regulate the goods transport but, actually, we can see a patchwork in the local regulation in spite of the implementation of the Urban Mobility Plan that defines global objectives. To better know the deliveries practices in town centres and to aid the local authorities, the model FRETURB was a good solution to define a new regulation or new infrastructures.

The survey of these 9 areas in Brittany was a first in this area and it shows a real will of the local authorities to include the goods transport with the intention of reducing the conflict between the users in the town centre. Moreover, a unique solution does not exist to facilitate the goods traffic and, even if the same solution was implemented in two towns, the results would not necessarily be similar. So, it

was interesting to bring together the areas of Brittany with the delivery professionals to discuss and to popularise the infrastructures and regulations that promote a better goods flow in the town.

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Note

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